

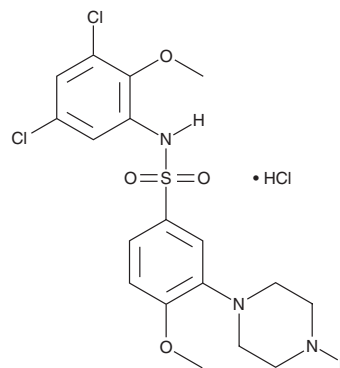
# PRODUCT INFORMATION



## SB-399885 (hydrochloride)

Item No. 32817

**CAS Registry No.:** 402713-81-9  
**Formal Name:** N-(3,5-dichloro-2-methoxyphenyl)-4-methoxy-3-(1-piperazinyl)-benzenesulfonamide, monohydrochloride  
**MF:** C<sub>18</sub>H<sub>21</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>4</sub>S • HCl  
**FW:** 482.8  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

SB-399885 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the SB-399885 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. SB-399885 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of SB-399885 (hydrochloride) in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of SB-399885 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of SB-399885 (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

SB-399885 is an antagonist of the serotonin (5-HT) receptor subtype 5-HT<sub>6</sub> (K<sub>i</sub> = 0.72 nM).<sup>1</sup> It is greater than 200-fold selective for 5-HT<sub>6</sub> receptors over a panel of receptors, ion channels, and enzymes at 10 μM. SB-399885 inhibits 5-HT-induced cAMP accumulation in HeLa cells expressing recombinant human 5-HT<sub>6</sub> receptors (pA<sub>2</sub> = 7.85). *In vivo*, SB-399885 increases the seizure threshold in a rat model of seizures induced by maximal electroshock (MES). It reduces escape latency in the Morris water maze in aged rats and reverses scopolamine-induced impairments in the novel object recognition task in adult rats when administered at a dose of 10 mg/kg. SB-399885 (10 mg/kg) decreases immobility time in the forced swim and tail suspension tests in mice.<sup>2</sup> It also increases drinking in the Vogel punished drinking task, indicating anxiolytic-like activity, in rats.

### References

1. Hirst, W.D., Stean, T.O., Rogers, D.C., *et al.* SB-399885 is a potent, selective 5-HT<sub>6</sub> receptor antagonist with cognitive enhancing properties in aged rat water maze and novel object recognition models. *Eur. J. Pharmacol.* **553**(1-3), 109-119 (2006).
2. Wesołowska, A. and Nikiforuk, A. Effects of the brain-penetrant and selective 5-HT<sub>6</sub> receptor antagonist SB-399885 in animal models of anxiety and depression. *Neuropharmacology* **52**(5), 1274-1283 (2007).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM